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CENTRAL INTELLIGENCE AGENCY

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INFORMATION REPORT

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SECURITY INFORMATION

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COUNTRY	USSR (Leningrad Oblast)	REPORT	
SUBJECT	Zavod 619 in Leningrad	DATE DISTR.	24 August 1953
		NO. OF PAGES	8
DATE OF INFO.		REQUIREMENT NO.	RD
PLACE ACQUIRED		REFERENCES	50X1-HUM

THE SOURCE EVALUATIONS IN THIS REPORT ARE DEFINITIVE.
THE APPRAISAL OF CONTENT IS TENTATIVE.
(FOR KEY SEE REVERSE)

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2. Following are the probable correct spellings of the names of the Soviets listed in Paragraph 2 of the attached report:

a. Sadownikow should be Sadovnikov.

b. Gogljev should be Goglyev.

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STATE	#x	ARMY	#x	NAVY	#x	AIR	#x	FBI		AEC					

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(Note: Washington Distribution Indicated By "X"; Field Distribution By "#".)

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SECURITY INFORMATION

REPORT [redacted]

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COUNTRY : USSR

DATE DISTR. 27 July 53

SUBJECT : Zavod 619, Leningrad

NO. OF PAGES 4

PLACE ACQUIRED [redacted]

NO. OF ENCLS. 3 (LISTED BELOW)

DATE ACQUIRED [redacted]

SUPPLEMENT TO REPORT NO. 50X1-HUM

DATE OF I[redacted]

THIS IS UNEVALUATED INFORMATION

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[redacted]

Location

1. Zavod 619 is located on the northern shore of Zerschiniki Island (59° 58' N, 30° 19' E) which is north of the center of Leningrad. [redacted] sketch of the area (see Enclosure (A)). Adjacent to the Zavod and to the northeast is the Pavlov Institute (Institute for Experimental Medicine). Also adjacent to the Zavod is the Leningrad Radio Station. On the top of one of the towers associated with this station is a television transmitting antenna. The television frequency is 50 megacycles. 50X1-HUM

Special Laboratory No. 5

2. One of the components of Zavod 619 is Special Laboratory No. 5. In 1950 the following persons worked in this laboratory.

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[redacted]

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SADOWNIKOW or SADOVNEKOW (German phonetic spelling). A Soviet who was chief of the Laboratory.

KOTOWSKI, Dr. Paul. Dr. KOTOWSKI was mainly concerned with loran ground station transmitting probleme. [redacted] 50X1-HUM

KAUFMANN, Dr. Dr. KAUFMANN worked on loran received oscilloscope presentation problems. Several Soviet built receivers were furnished for his use. [redacted] 50X1-HUM

ALMOND, Dr., a physicist who specialized in antenna problems. [redacted] 50X1-HUM

FEUSSNER, Helmut. Worked on the development of various components for loran stations. [redacted] 50X1-HUM

FEUSSNER, Hannes., son of Helmut. Returned to East Germany in December 1950.

GOGLJEV (German phonetic spelling), a Soviet mechanic in the laboratory.

WIEDEMANN, Ozula, secretary and draftswoman. Returned to East Germany in December 1950.

The Germans (in the above list) formerly worked at HF Werk (Oberspreewerk) in Berlin and were taken to the USSR in October 1946. 50X1-HUM

3. [redacted] this German group was transferred to the Svetlana Tube Fabtory sometime during 1951 and is still there. [redacted] 50X1-HUM

4. Special Laboratory No. 5 consisted of two connecting rooms, approximately 8 x 10 meters with entrance through the workshop. The Germans worked in the rear room and the two Russians worked in the outer one. [redacted] sketch of the laboratory arrangement (see Enclosure (A)). The following equipment was in the laboratory: 50X1-HUM

a. Three cathode ray oscilloscopes of which one was manufactured by RCA and had a 20-25 centimeter scope, and one by General Electric and had a 15 centimeter scope. [redacted] 50X1-HUM

b. A tube testing instrument [redacted]

c. Two ohmmeters (battery type) [redacted]

d. Several small, portable volt and ammeters - Soviet type.

e. Signal Generator - [redacted] but it was only 50X1-HUM for medium and long wavelengths.

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[redacted] 50X1

f. Small drilling machine - bench type.

g. Soldering irons of Soviet design.

Work at Zavod 619

5. Between 1947 and 1950 two experimental loran receivers were assembled. [redacted] a sketch of this work /see Enclosure (B)/. 50X1-HUM

a. The receiver consisted of three removable sections mounted in a metal case approximately 30 x 60 x 70 centimeters. The top section had a cathode ray tube and associated controls, two of which were for pip positioning. One was a two-way momentary toggle switch for course pip positioning and the other a variable capacitor for Vernier control. The cathode ray tube, at first, was 10 centimeters and finally 8 centimeters in diameter.

b. The middle section was the receiver part with a two position toggle switch controlling the receiver frequency which was around 200 kilocycles. [redacted] only two frequencies could be received. 50X1-HUM 50X1-HUM

c. The bottom section contained three controls for varying pip height from stations A, B, and C. There was also a range switch (Mallory type, 4 or 5 position) for changing the time scale (sweep frequency) on the oscilloscope. There were other controls [redacted] 50X1-HUM

d. The vacuum tube complement consisted of copies of American types 6SN7 and 6AC7's. [redacted] 50X1-HUM
Power supply for the receiver was taken from an inverter (24 volts DC input - 800 cycle output [redacted] 50X1-HUM

e. Components available at first were of German manufacture and later of Soviet manufacture. The latter were generally a larger size (dimensionally) and of poorer quality than those manufactured in Germany. There was also a 50 kilocycle quartz crystal (steuer Quartz) in the receiver. It was of Soviet manufacture and of very poor quality. FEUSSNER constructed an apparatus for maintaining the quartz crystal at a constant temperature.

f. [redacted] 50X1-HUM
the accuracy required was 300 meters (range unknown) and a time interval of one micro second between two impulses could be read on the oscilloscope.

6. In the latter part of 1950 FEUSSNER* had on hand an order for a training device to facilitate instruction of loran operators. At the time he had partially completed it. [redacted] a sketch 50X1-HUM of it /see Enclosure (C)/. The training aid was a table on which an electrically driven target moved. Wires were fastened to this target from three "Goniometers" and as the target moved, the length of the wires changed and the "Goniometers" rotated as indicated on the sketch. This mechanical movement was converted to electrical signals [redacted] and presented

* (Helmut FEUSSNER) 50X1-HUM

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on a regular loran receiver scope.

Other Germans

7. There was another group of Germans who lived in the same area (near the Svetlana Tube Factory) as the Zavod 619 group. They worked in Svetlana. Dr. GROSS, Hans KOTOWSKI, OBERLAENDER, UEBERUECK, Dr. ZINKE, FELBER, ZIMMERMANN, STAHN, and SITTEL. 50X1-HUM 50X1-HUM

Foreign Technical Literature

8. importance attached to foreign technical literature and in particular the Proceedings of the Institute of Radio Engineers. 50X1-HUM 50X1-HUM the loran development work closely followed and copied, to a large degree, the existing American system.

ENCLOSURE (A): Area Surrounding Zavod 619
ENCLOSURE (B): Loran Receiver Sketch) 50X1-HUM
ENCLOSURE (C): Loran Training Table Sketch)

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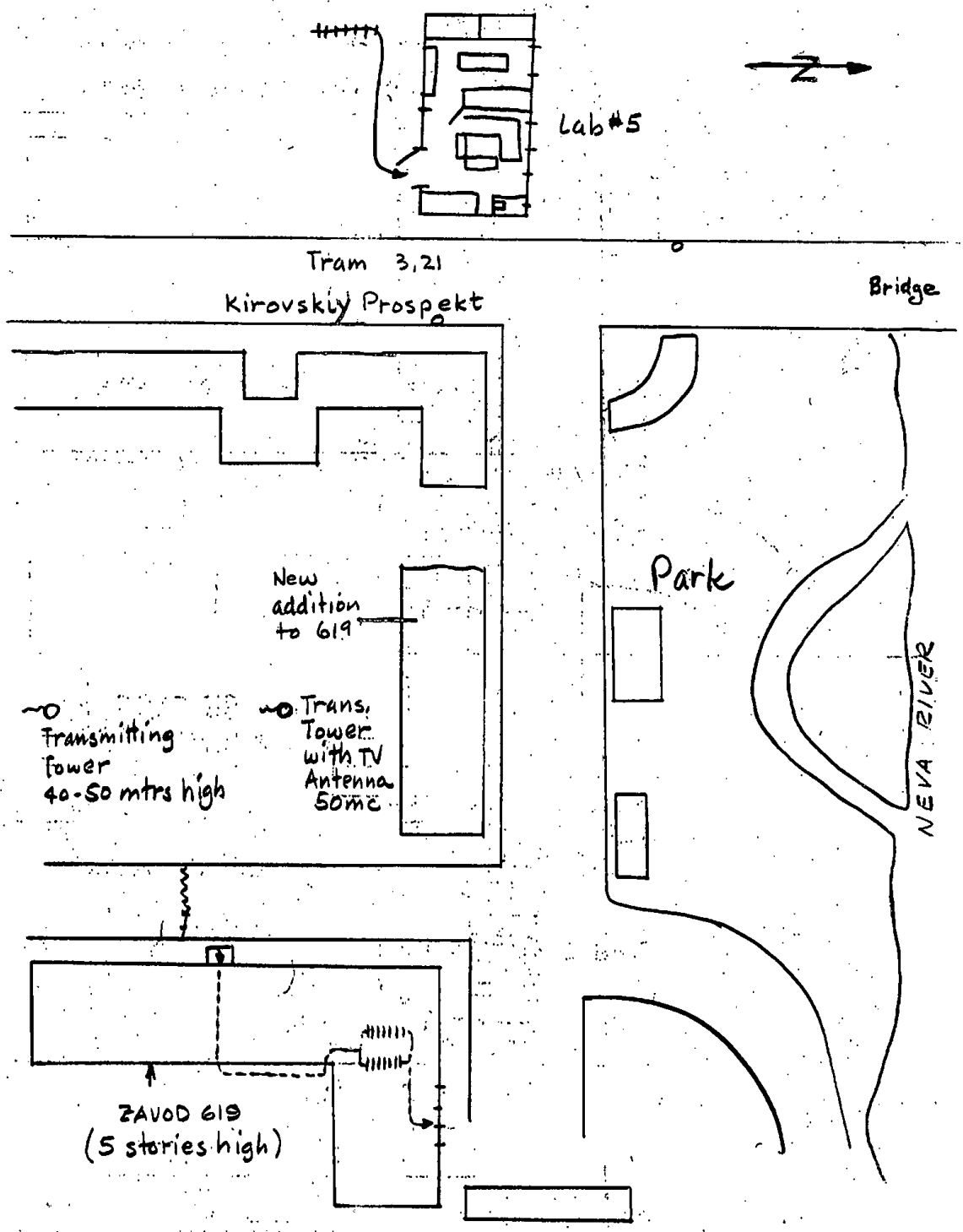

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Enclosure (A)

Area Surrounding Zavod 619

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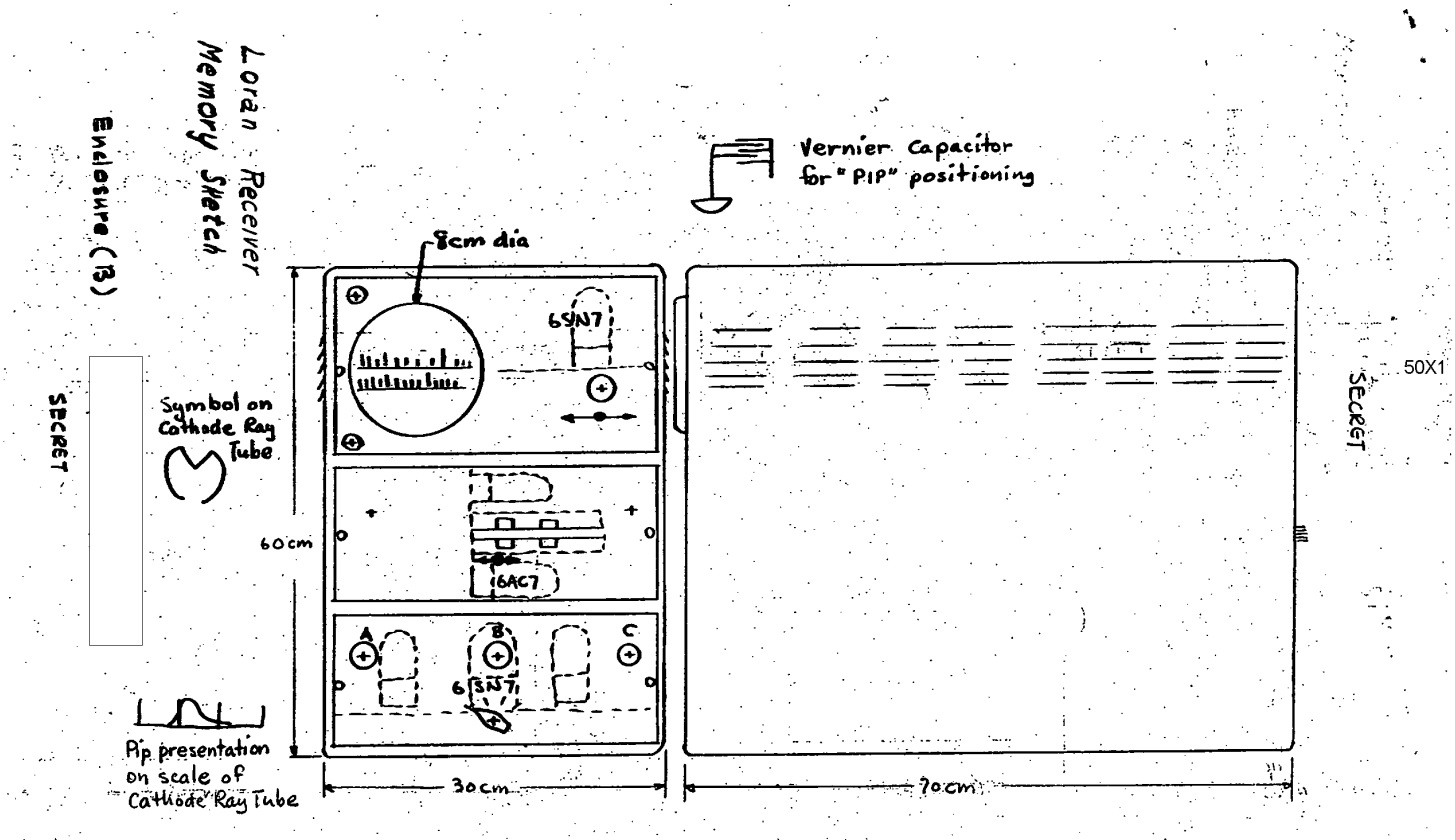

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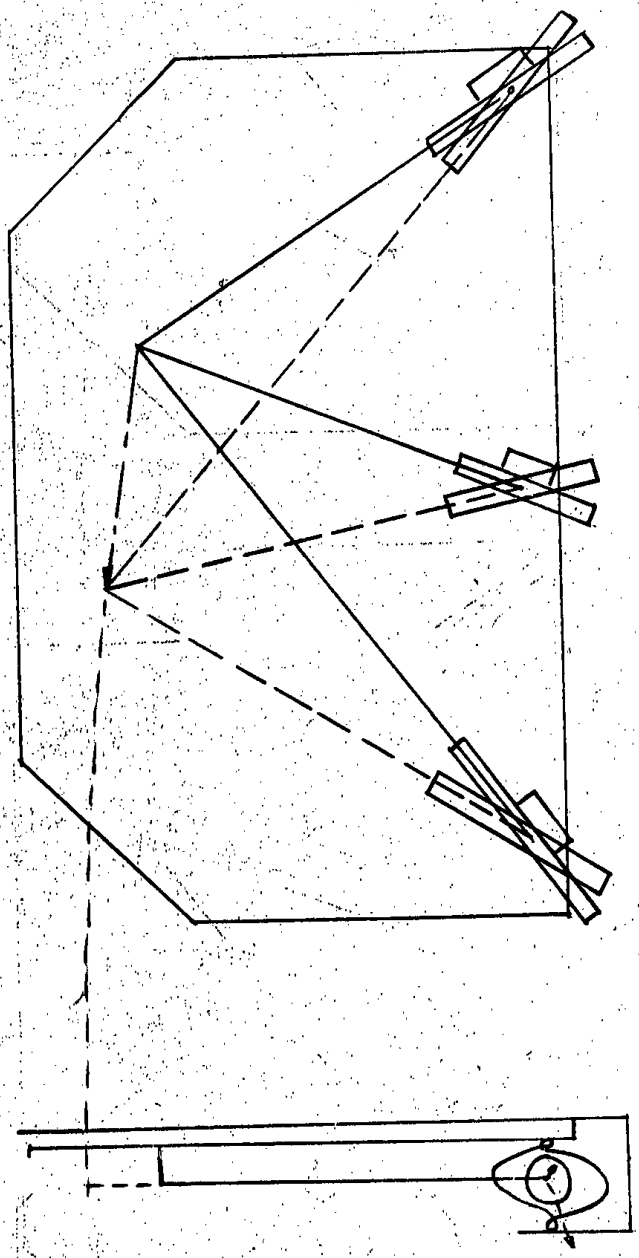

Memory sketch of Loran Training Table

Enclosure (C)

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